

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) SC13159TC
Certificate of Transmission under 37 CFR 1.8 I hereby certify that this correspondence is being _____ facsimile transmitted or <u> X </u> e-filed to the United States Patent and Trademark Office - Mail Stop AF. on <u> 9-19-06 </u> Signature <u> /Pat Thomas/ </u> Typed or printed name: Pat Thomas	Application Number 10/806612 First Named Inventor NAHAS, JOSEPH J. Art Unit 2123	Filed 3/23/2004 Examiner Juan Carlos Ochoa
<p>Applicant request review of the final rejection in the above identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <div style="display: flex; justify-content: space-between;"><div style="width: 60%;"><p><input type="checkbox"/> applicant/inventor.</p><p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p><p><input checked="" type="checkbox"/> attorney or agent of record. Registration number: 47,093</p><p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34 Registration number if acting under 37 CFR 1.34 _____</p></div><div style="width: 35%; text-align: right;"><p>_____ /Ranjeev Singh/ Signature</p><p>_____ SINGH, RANJEEV Typed or printed name</p><p>_____ (512) 996-6839 Telephone number</p><p>_____ Date</p></div></div> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p>		

<input checked="" type="checkbox"/> *Total of <u> 1 </u> forms are submitted

The collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality if governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

REMARKS**STATUS**

In an Advisory Action mailed on August 17, 2006, the Examiner indicated that the Response to Final Office Action, filed on July 19, 2006, did not place this case in a condition for allowance. *See* Advisory Action, mailed on August 17, 2006). Applicant's representative is thankful to the Examiner for the indicated allowance of the subject matter of claims 29-31, 33, and 39-40. Although the Advisory Action explicitly indicates that the rejection of claims 29-1, 33, and 39-40 has been withdrawn and the rejection of claims 1-4, 6, 12-14, and 41 under 35 U.S.C. § 103(a) based on the purported combination of Kim and Savtchenko is maintained, it does not address the rest of the claims. Accordingly, Applicant is unclear as to the status of the remaining pending claims: 5, 7-11, 15-29, 32, 34-36, and 38.

Further, in the Advisory Action the Examiner continues to maintain his view of the teachings the two main references and his view of the evidence establishing a teaching or suggestion to combine the two main references: Kim and Savtchenko. (*See* Advisory Action, mailed on August 17, 2006, continuation of 11, page 2).

CLEAR ERROR IN THE REJECTION OF CLAIMS 1-4, 6, 12-14, AND 41 UNDER 35 U.S.C. § 103(a)

Applicant respectfully requests that there is "clear error" in the Examiner's rejection of claims 1-4, 6, 12-14, and 41 under 35 U.S.C. § 103(a) because the Examiner has failed to establish a prima facie case of obviousness. Moreover, to the extent claims 5, 7-11, 15-29, 32, 34-36, and 38 are still rejected, these claims are also allowable. In particular, as explained in the July 19 Response, the Examiner has not established a prima facie case of obviousness because there is no suggestion or motivation to combine the two references in the manner proposed by the Examiner (*See* Response to Final Office Action, filed on July 19, 2006, at pp. 13-14).

Pursuant to the guidelines provided by the U.S. PTO in the Official Gazette on July 12, 2005, under the heading "New Pre-Appeal Brief Conference Pilot Program," Applicant is highlighting the clear error related to the rejection of claims 1-4, 6, 12-14, and 41, and is not

focusing on other errors. In particular, Applicant is focusing on the Examiner's failure to show a proper motivation for combining the two main references: Kim and Savtchenko and modifying the teachings of these references to arrive at the combinations claimed in claims 1-4, 6, 12-14, and 41.

In this respect, the Examiner concedes that Kim does not teach or suggest "outputting a bit state that is dependent upon a specific sequence of a plurality of operating conditions," as required by these claims. (*See* Advisory Action, pp. 2). The Examiner then concludes that Savtchenko discloses this claimed step. (*See id.*) Applicant respectfully disagrees.

In particular, as explained previously, unlike the claimed subject matter, which is directed to a method of simulating a MRAM, Savtchenko is directed to a method for writing an MRAM. (col. 2, ll. 3-16). In the context of writing to a MRAM, Savtchenko teaches two methods for writing to an MRAM: (1) the direct writing method and (2) the toggle writing method. (col. 3, ll. 54-60). According to Savtchenko, these "modes are achieved using the same timed pulse sequence ... but differ in the choice of magnetic sub-layer moment and polarity and magnitude of the magnetic field applied. (col. 3, ll. 57-60). Thus, Savtchenko teaches two different methods of writing to the MRAM; however, it has nothing to do with a method for simulating an MRAM including the step of "outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions."

The Examiner barely addresses this issue in the Advisory Action and instead concludes that because Figures 6 and 7 show an item no. 100 "compatible" with Applicant's Figure 4, Savtchenko teaches "outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions." (*See* Advisory Action, mailed on August 17, 2006, continuation of 11, page 2, first paragraph, lines 4-6). Applicant respectfully submits that item 100 in Figures 6 and 7 is merely showing pulse sequence 100, which is used to write the MRAM in the direct writing method or the toggle method. As explained above, these writing modes include the use of the same pulsed sequence 100, except the choice of magnetic sub-layer moment and polarity and magnitude of the magnetic field applied. (col. 3, ll. 57-60). Thus, at best Savtchenko teaches the use of two different modes of writing in which a pulsed sequence 100 having a chosen magnetic moment, polarity, and magnitude can be used. Presumably, these parameters associated with the pulse

would vary in the two modes. That, however, does not teach “outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions” recited as part of a method for simulating an MRAM including the step of:

modifying a status of an operating condition of a plurality of operating conditions in response to the detecting the indication of the transition; and
outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions.

Specifically, when viewed as a combination, the Examiner’s logical leap related to the teachings of Savtchenko is improper hindsight based on Applicant’s disclosure. In other words, absent improper hindsight, relied upon by the Examiner, a person of ordinary skill in the art would not be motivated to modify the teachings of Savtchenko as proposed by the Examiner.

Next, having explicitly conceded in the first part of the first paragraph of the Advisory Action that Kim does not teach or suggest “outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions,” the Examiner appears to rely on the teachings of Kim to cure the deficiencies of teachings of Kim. (See Advisory Action, mailed on August 17, 2006, continuation of 11, page 2, first paragraph, lines 8-15). Regardless, Applicant respectfully disagrees with the Examiner’s position. For reasons given earlier and accepted by the Examiner earlier, Applicant submits that Kim does not teach or suggest “outputting a bit state that is dependent upon a specific sequence of a status of the plurality of operating conditions.” (See March 21, 2006 Amendment, page 15, last paragraph and see Advisory Action, mailed on August 17, 2006, continuation of 11, page 2, first paragraph, lines 1-3). Thus, because both Kim and Savtchenko fail to teach or suggest at least one limitation of claims 1-4, 6, 12,-14, and 41, a person of ordinary skill in the art would not be motivated to combine the two references in the manner proposed by the Examiner.

Even if the two references are analogous, a person of ordinary skill in the art would not be motivated to combine the two references in the manner proposed by the Examiner based on the mere fact that they are purportedly analogous. Rather than speculate as to what

would result from a purported combination of the two references in the manner proposed by the Examiner and whether it would work for its intended purpose, for the reasons given above, Applicant submits that the Examiner has failed to show proper motivation to combine and modify the two references. Absent such a showing, the Examiner has failed to establish a prima facie case of obviousness and committed clear error in maintaining the rejection of claims 1-4, 6, 12,-14, and 41. Accordingly, Applicant respectfully requests the pre-appeal brief conference panel to reconsider the rejection of claims 1-4, 6, 12,-14, and 41 under 35 U.S.C. § 103(a) based on a purported combination of Kim and Savtchenko and indicate allowance of these claims, as well, placing the case in a condition for allowance.